

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the present application:

1-11. (Canceled).

12. (Previously presented) A method of processing a web page comprising:

receiving a web page in a server, wherein the web page includes a plurality of data elements and wherein each one of the plurality of data elements is of at least one of a plurality of known data types;

automatically classifying each one of the plurality of data elements as being of one or more of the data types;

automatically determining a plurality of related operations that can be performed for each one of the plurality of classified data elements, based on the data type or types of which each said data element has been classified;

causing an indication of each of the plurality of related operations to be output to a user on a wireless user terminal when the user accesses the web page, to enable the user to invoke any of the related operations from the wireless user terminal;

extracting data from each one of the plurality of classified data elements;

receiving a selection of one of the plurality of related operations;

outputting the extracted data corresponding to the selected one of the plurality of related operations; and

processing the extracted data in the selected one of the plurality of related operations.

13. (Previously presented) A system for processing a web page comprising:

a processor;

a storage facility coupled to the processor and containing instructions executable by the processor to cause the processing system to

receive a web page, wherein the web page includes a plurality of data elements and wherein each one of the plurality of data elements is of at least one of a plurality of known data types;

classify each one of the plurality of data elements as being of one or more of the data types;

determine a plurality of related operations for each one of the plurality of classified data elements, based on the data type or types of which each said data element has been classified; and

cause the plurality of related operations to be indicated to a user when the user accesses the web page, to enable the user to invoke any of the related operations.

14. (Original) The system of claim 13, further comprising a user terminal coupled to the processor and wherein the instructions executable by the processor further configure the processing system to determine a plurality of related operations for each one of the plurality of classified data elements and output the plurality of related operations to a user terminal.

15. (Original) The system of claim 14, wherein the processor is coupled to the user terminal via a network.

16. (Original) The system of claim 15, wherein the network includes at least one of a group consisting of a wireless application protocol (WAP), an Internet, an intranet, a local area network (LAN) and a wide area network (WAN).

17. (Original) The system of claim 15, wherein the user terminal includes at least one of a group consisting of a personal digital assistant (PDA), a telephone, a cellular telephone, a two-way pager, a computer, a website, and a server.

18. (Previously presented) A machine-readable program storage medium tangibly embodying a sequence of instructions executable by a machine to cause the machine to perform a process comprising:

receive a web page, wherein the web page includes a plurality of data elements and wherein each one of the plurality of data elements is of at least one of a plurality of known data types;

classify each one of the plurality of data elements as being of one or more of the data types;

determine a plurality of related operations for each one of the plurality of classified data elements, based on the data type or types of which the data element has been classified; and

cause an indication of the plurality of related operations to be output to a user when the user accesses the web page, to enable the user to invoke any of the related operations.

19. (Canceled).

20. (Previously presented) The machine-readable program storage medium of claim 18, wherein causing the indication of the plurality of related operations to be output includes promoting at least one of the plurality of related operations.

21. (Original) The machine-readable program storage medium of claim 20, wherein promoting at least one of the plurality of related operations comprises:

selecting one of the pluralities of related operations;

displaying the selected one of the plurality of related operations in a first mode; and

displaying the unselected ones of the plurality of related operations in a second mode.

22. (Original) The machine-readable program storage medium of claim 20, wherein promoting at least one of the plurality of related operations comprises:

selecting at least one of the pluralities of related operations wherein the selection is determined by a preference.

23. (Previously presented) The machine-readable program storage medium of claim 22, wherein the preference is based on a user profile.

24. (Original) The machine-readable program storage medium of claim 22, wherein the preference comprises a service provider preference.

25. (Previously presented) The machine-readable program storage medium of claim 22, wherein the preference is based on a financial incentive.

26. (Previously presented) The machine-readable program storage medium of claim 18, wherein the process further comprises:

extracting data from each one of the plurality of classified data elements ;

receiving a selection of one of the plurality of related operations;

outputting the extracted data corresponding to the selected one of the plurality of related operations; and

processing the extracted data in the selected one of the plurality of related operations.

27. (Previously presented) The machine-readable program storage medium of claim 18, wherein the process is executed on a user terminal.

28. (Previously presented) The machine-readable program storage medium of claim 18, wherein the process is executed on a server.

29. (Previously presented) The machine-readable program storage medium of claim 18, wherein the process is executed on a server and a user terminal.

30. (Previously presented) An apparatus for processing a web page comprising:  
means for receiving a web page, wherein the web page includes a plurality of data elements and wherein each one of the plurality of data elements is of at least one of a plurality of known data types;

means for automatically classifying each one of the plurality of data elements as being of one or more of the data types;

means for automatically determining a plurality of related operations for each one of the plurality of classified data elements, based on the data type or types of which the data element has been classified; and

means for outputting an indication of the plurality of related operations to a user when the user accesses the web page, to enable the user to invoke any of the related operations.

31. (Previously presented) The apparatus of claim 30, wherein the means for outputting the indication of the plurality of related operations includes means for promoting at least one of the plurality of related operations.

32. (Original) The apparatus of claim 31, wherein the means for promoting at least one of the plurality of related operations comprises:

means for selecting one of the pluralities of related operations;

means for displaying the selected one of the plurality of related operations in a first mode; and

means for displaying the unselected ones of the plurality of related operations in a second mode.

33. (Previously presented) The apparatus of claim 31, wherein the means for promoting at least one of the plurality of related operations comprises:

means for selecting at least one of the pluralities of related operations wherein the selection is determined by a preference.

34. (Previously presented) The apparatus of claim 33, wherein the preference comprises a user preference.

35. (Original) The apparatus of claim 33, wherein the preference comprises a service provider preference.

36. (Original) The apparatus of claim 33, wherein the preference comprises a financial incentive.

37. (Original) The apparatus of claim 30, further comprising:

means for extracting data from each one of the plurality of classified data elements;

means for receiving a selection of one of the plurality of related operations;

means for outputting the extracted data corresponding to the selected one of the plurality of related operations; and

means for processing the extracted data in the selected one of the plurality of related operations.

38. (Previously presented) A method of processing a web page comprising:

automatically classifying a data element in the web page as being of a known data type;  
automatically determining a related operation that can be performed in relation to the data element, based on the data type of which the data element has been classified; and  
causing the related operation to be indicated to a user when the user accesses the web page, to enable the user to invoke the related operation.

39. (Previously presented) The method of claim 38, further comprising:

causing the related operation to be promoted over at least one other related operation when the related operation and said at least one other related operation are indicated to the user.

40. (Previously presented) The method of claim 39, wherein causing the related operation to be promoted comprises:

selecting the related operation based on a preference.

41. (Previously presented) The method of claim 40, wherein the preference is a user preference.

42. (Previously presented) The method of claim 40, wherein the preference comprises a service provider preference.

43. (Previously presented) The method of claim 40, wherein the preference comprises a financial incentive.

44. (Previously presented) The method of claim 38, further comprising:

extracting data from the data element;

receiving a selection of the related operation by the user;

outputting the extracted data corresponding to the selected related operation; and

processing the extracted data in the selected related operation.

45. (Previously presented) The method of claim 38, wherein the method is executed on a user terminal.

46. (Previously presented) The method of claim 38, wherein the method is executed on a server.

47. (Previously presented) The method of claim 38, wherein the method is executed on a server and a user terminal.

48. (New) A wireless device comprising:

a processor;

a network interface that couples to a wireless network to receive incoming and outgoing data;

a display to for displaying information;

a memory coupled to the network interface to receive and send data, the memory storing instructions, when executed, cause the processor to

classify a data element of a web page received via the network interface as being of a data type;

determine a plurality of related operations for the data element, based on the data type;

and

display the plurality of related operations on the display to enable a user to invoke any of the related operations.



49. (New) The wireless device of claim 48 further comprising a keypad to enable the user to select one of the plurality of related operations and to invoke the selected operation.

50. (New) The wireless device of claim 48, wherein display the plurality of related operations on the display includes promote at least one of the plurality of related operations.

51. (New) The wireless device of claim 50, wherein said at least one of the plurality of related operations are promoted based on a user preference.